SAFETY REGULATIONS

ALL EXCAVATION AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MARYLAND OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (MOSHA) STANDARDS AS SET FORTH IN THE LATEST VERSION OF THE CODE OF MARYLAND REGULATIONS

THERE WILL BE NO CHANGES IN SPECIFICATION, DIMENSIONS, OR MATERIALS UNLESS APPROVED BY THE ENGINEER RESPONSIBLE FOR THIS DRAWING.

THE DRAWINGS ARE PREPARED COOPERATIVELY BY THE NATURAL RESOURCE CONSERVATION SERVICE FOR THE NAMED LANDOWNER. CONSTRUCTION FOUND NOT IN ACCORDANCE WITH THESE DRAWINGS AND SPECIFICATIONS SHALL VIOLATE THE COOPERATIVE AGREEMENT AND ALL DRAWINGS, SPECIFICATIONS, AND QUANTITIES ESTIMATE SHALL IMMEDIATELY BE RETURNED TO THE LOCAL NRCS OFFICE.

LANDOWNER/PROJECT

309 - ÆGRICHEMICÆL HÆNDLING FÆCILITÝ DISTRICT SOIL CONSERVÆTION DISTRICT

CRITICAL INSPECTION ITEMS - (Agrichemical Handling Facilities)

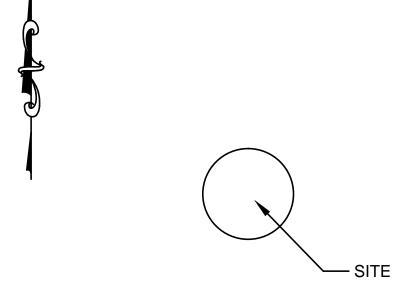
/20/15

- The landowner will arrange for a pre-construction meeting between the contractor, NRCS and landowner to review the plans, standards and specifications prior to the start of construction.
- There will be no changes in specifications, dimensions, or materials unless approved by the engineer responsible for this drawing.
- 3. The drawings are prepared cooperatively by the Natural Resources Conservation Service for named owner/operator. Construction found not in accordance with these drawings and specifications shall violate the cooperative agreement and all drawings, specifications, and Quantities Estimate shall immediately be returned to the local NRCS office.
- 4. The following is a list of items that must be inspected by the Technician-in-Charge. If cost share is involved, payment may be forfeited if the Technician-in-Charge does not inspect all of the below:

•	Preconstruction Meeting	Date:	Initials:
•	Verify layouts:	Date:	Initials:
•	Verify all subgrades:	Date:	Initials:
•	Verify all subgrade materials CR-6 etc:	Date:	Initials:
•	Verify reinforcing steel grade, size and placement:		
	Footings:	Date:	Initials:
	Walls and/or curbs:	Date:	Initials:
	Floor:	Date:	Initials:
•	Inspect all concrete in accordance with specifications:		
	Footings:	Date:	Initials:
	Walls and/or curbs:	Date:	Initials:
	Full dimension wall ties:	Date:	Initials:
	Floor:	Date:	Initials:
•	Proper curing of concrete:	Date:	Initials:
•	Patching wall ties, holes and honeycombing:	Date:	Initials:
•	Microsilica admixture or protective coating in place	Date:	Initials:
•	Building inspection in accordance with plans:		
	Posts size, material and installation:	Date:	Initials:
	Preservative treatment or use code:	Date:	
	Anchors or embedment installation:	Date:	
	Header size, material and installation:		Initials:
	Hardware size, spacing, and type:	Date:	Initials:
	Knee brace (post to truss) size and material:	Date:	
	Hardware size, spacing, and type:	Date:	Initials:
	Y brace (post to header) size and material:	Date:	Initials:
	Hardware size, spacing, and type:	Date:	Initials:
	Hurricane straps:	Date:	Initials:
	Received/reviewed truss design sheet:	Date:	Initials:
	Purlins and girts, material and installation:	Date:	Initials:
	Hardware size, spacing, and type:	Date:	Initials:
	Siding and roofing, material and installation:	Date:	Initials:
	Hardware size, spacing, and type:	Date:	Initials:
9	Subsurface Drainage (if applicable)		
	Drain placement and installation:	Date:	Initials:
F	Proper outlet and rodent guard:	Date:	Initials:
•	Backfill placement and compaction	Date:	Initials:
•	All disturbed areas seeded and mulched:	Date:	Initials:
•	Eye wash station:	Date:	Initials:
•	Fire extinguisher (Type ABC 20Lb Minimum):	Date:	
•	Signs in Place (Made of all-weather material):	Date:	
•	Water supply with Backflow Preventer:		Initials:

GENERAL NOTES:

- PLEASE CONTACT THE LOCAL SOIL & WATER CONSERVATION DISTRICT AT LEAST 3 DAYS PRIOR TO CONSTRUCTION TO ARRANGE A PRE-CONSTRUCTION MEETING @ PHONE #
- A CONSERVATION TECHNICIAN SHALL VERIFY CUT/GRADE STAKES AT THE CONTRACTORS REQUEST
- A PERMANENT WATER SUPPLY LINE SHALL BE INSTALLED IN THE STRUCTURE WITH REQUIRED BACKFLOW PREVENTER
- GRADE SITE TO ALLOW WATER TO FLOW AWAY FROM STRUCTURE



REVISED 4/3/2015

VICINITY MAP

N.T.S.

<u>SHEET</u>	<u>TITLE</u>	
2	PLAN VIEW/COM	NSTRUCTION SEQUENCE
3	TYPICAL PLAN	VIEW/END VIEW/ SIDE VIEW/ CROSS SECTION VIEW
4	SECTION VIEW	A-A', B-B' AND C-C'
5	FRAMING DETA	IL AND ROOFING DETAILS
6	CONCRETE DET	TAILS AND NOTES/SEEDING/ACCESS LANE



"The Soil Conservation District makes no representation as to the existence or Non-existence of any utilities at the construction site. Shown on these construction drawings are those utilities which have been identified. It is the responsibility of the landowners or operators and contractors to assure themselves that no hazard exists or damage will occur to utilities"

AS-BUILT STATEMENT

THE CONSERVATION PRACTICE(S) MEETS OR EXCEEDS NRCS STANDARDS AND SPECIFICATIONS		
INSPECTED BY	SIGNATURE	DATE
CONSTRUCTION APPROVAL VERIFIED DISTRICT	SIGNATURE	DATE
CONSERVATIONIST	SIGNATURE	DATE

REPORTABLE ITEMS:
309 AgriChemical Handling Facility 1 St.

OWNER/CONTRACTOR STATEMENT

I CERTIFY THAT THIS DESIGN HAS BEEN EXPLAINED TO ME BY A REPRESENTATIVE OF THE LOCAL SOIL CONSERVATION DISTRICT, AND I UNDERSTAND THE CONTENTS, ALL CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND SPECIFICATIONS, I FURTHER UNDERSTAND THAT ALL CONSTRUCTION WILL BE UNDER THE INSPECTION OF THIS OFFICE.

OWNER/OPERATOR SIGNATURE DATE

CONTRACTOR'S SIGNATURE DAT

FACILITY Marylan OWN! LAND(AGRICHEMICAL File No. *.DWG Sheet 1 of 6

(OPTIONAL)

MATERIALS LIST

USED FOR ESTIMATE PURPOSES ONLY



AGRICHEMICAL HANDLING FACILITY CONSTRUCTION SEQUENCE

- A pre-construction meeting with the landowner, contractor, and SCD Technician is <u>REQUIRED</u>.
- 2. LANDOWNER IS RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS.
- 3. Install sediment controls by direction of technician/engineer or as shown on plan (including all stockpiles).
- 4. Strip topsoil and safely stockpile as shown on plan.
- Excavate site.
- 6. Install electrical conduit and waterlines to structure.
- 7. Set post, girders, trusses, and brace boards.
- Install stone where concrete will be installed.
- Set forms, placement of steel, and set reinforcement wire.
- 10. Pour slab, footer, wall, curbs, etc.
- 11. Install footer drain/stone, gutter outlets as directed by technician/engineer.
- 12. Install safety eye wash and shower and signs.
- 13. Backfill and grade site to allow water to flow away from building, establish seedbed.
- 14. Seed all disturbed areas to establish vegetative cover (as per recommended).

Agrichemical Mixing Facility Construction Notes:

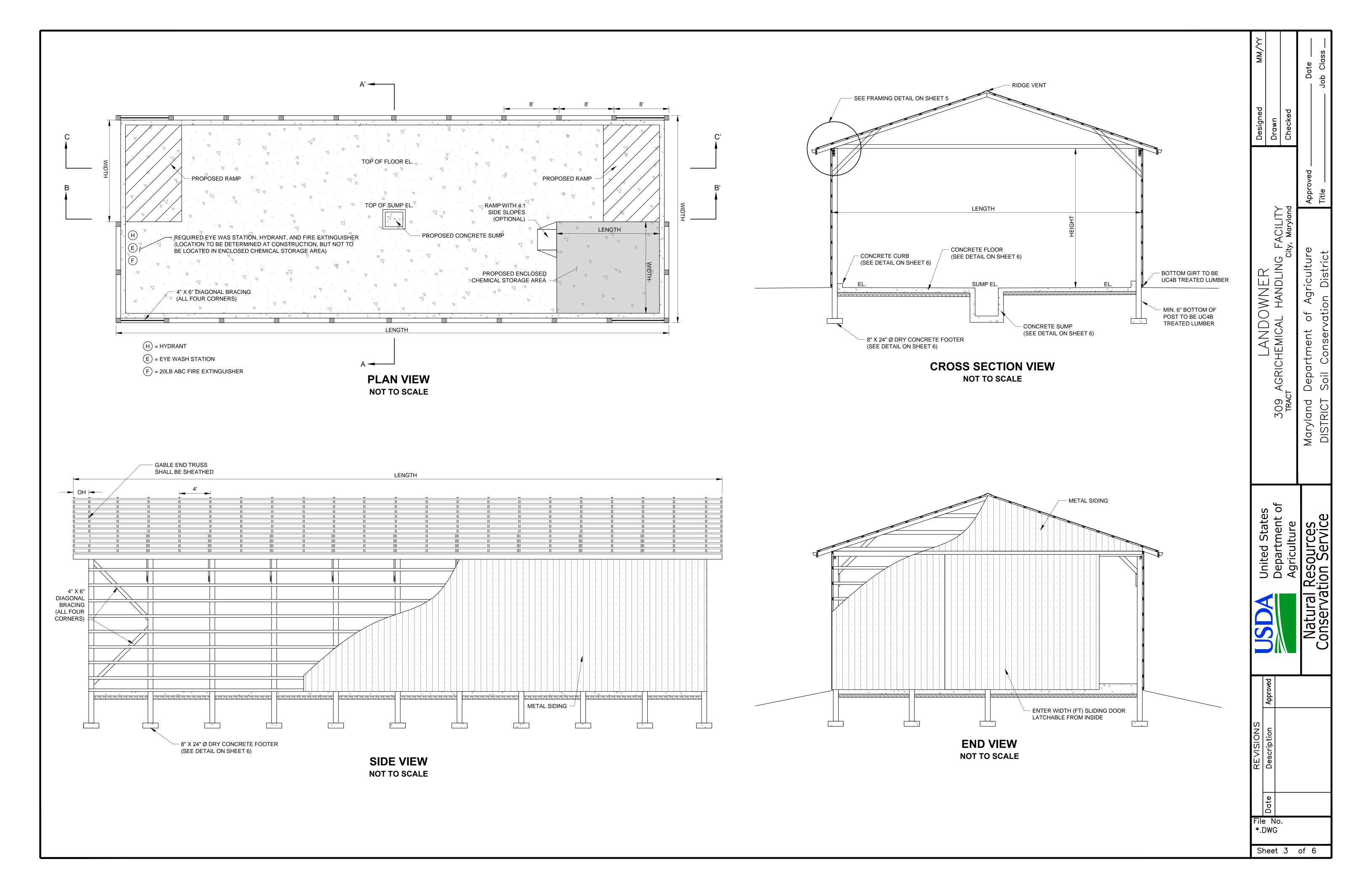
- Outlet drains are not permitted in the chemical collection area or the chemical-mixing and loading pad.
- Producers are responsible for securing the necessary permits to install the required facilities and for properly managing the facility.
- To prevent the surface from contamination from chemicals, all concrete exposed to chemicals must have a Micro-silica admixture for concrete meeting the requirements of ASTM 1240 Designation C or be sealed with a chemically resistant non-vapor forming coating.
- Use a chemically resistant submersible pump or an above ground centrifugal or piston pump that
 creates a minimum of turbulence within the sump. The pump may be operated either electrically
 or manually. Provide a filter between the sump pump and sprayer or rinsate tanks.
- All electrical components shall be waterproof and explosion proof for the submersible pump and waterproof for the above ground pump. Install all electrical components in accordance with local and national electrical codes.
- Provide a reliable water supply at the pad with a minimum rate of 5 gallons/minute for filling the sprayers and rinsing the chemical containers, spray tanks, and chemical-mixing pad. A hose or pipeline shall be installed for conveyance of water from the water supply to the pesticide containment facility. <u>Provide back flow preventers, anti-siphoning devices, and a method to allow winterizing of the pipelines on all water supply lines.</u> Locate the water supply pump and well outside of the containment facility.
- All parts of the plumbing system shall be corrosion resistant. Outlet drains are not permitted in the chemical storage, mixing, loading and collection areas. Design all plumbing to allow for easy drainage to prevent freezing.
- A permanent water supply line is required at the facility for an emergency washing area. Locate
 the emergency washing area where it is easily accessible to the facility user. Include with the
 emergency washing area a faucet and emergency eye wash station. A drop shower is strongly
 recommended.
- The entrance to the chemical-mixing pad shall be graveled and/or paved, or otherwise treated to provide a suitable entrance for the equipment and to prevent erosion and the tracking of sediment onto the chemical-mixing pad. Minimum width of the entrance shall be 4 feet wider than the widest piece of equipment used at the facility. The length of the entrance shall be a minimum of 1.5 times the largest wheel circumference of the equipment used at the facility.
- A mixing platform may be used to facilitate the filling of the spray equipment. The recommended minimum platform size is 2.5 to 3 feet high, with a minimum work area of 3 feet by 4 feet and is moveable on the pad.
- Provide a rinsate storage tank to temporarily hold rinsates resulting from cleaning the chemicalmixing pad or sprayer. Locate the rinsate tank(s) on the chemical-mixing pad.
- Label the tanks with type of chemicals. Tanks shall be fiberglass, polyethylene, or other durable material and have the capacity to meet the requirements of the operation plan. Provide a separate tank for each target crop. Herbicides should be kept in separate tanks from any other compounds.
- Post highly visible waterproof warning signs, such as "CAUTION, CHEMICAL STORAGE AREA," or similar signs at all entrances to the facility. Place "NO SMOKING" signs both outside and inside the facility. Bilingual signs are recommended. All signs (size, location, color, etc.) shall meet the requirements of Occupational Safety and Health Administration (OSHA) 29
- CFR 1910.144 and 29 CFR 1910.144; American National Standards Institute (ANSI) Z35.1-1979, Z35.4-1973, Z525.1-1991, and Z535.2-1991; and any applicable federal, state, or local laws and regulations.
- Where chemicals are stored on-site, provide a secure area for protection against vandalism or unauthorized access. The chemical storage area shall include appropriate safety devices

MM			Date	Job Class_
Designed	Drawn	Checked		
	>	þı	Approved	Title
	YII IIOAA GNI IUNAH IAOMAGA AGBICHEMICAH HANDI HANDI EACH	TRACT	Maryland Department of Agriculture	DISTRICT Soil Conservation District
Hoitod Ctator	Department of	Agriculture	Resources	tion Service
ICDA	てつつ		Natural	Conservation Se
	Approved		1	
REVISIONS	Description			
	te			

File No. *.DWG

Sheet 2 of 6

PLAN VIEW



SECTION A - A' USER TO SHOW SECTIONS A THRU C ON THIS SHEET FOR THE DESIGN SEE PLAN VIEW ON SHEET 3 TO SEE LOCATIONS OF THE SECTIONS REQUIRED SECTION B - B' SECTION C - C' Sheet 4 of 6

TRUSS DESIGN NOTES

Truss shown on the drawing is for illustration purposes only. Trusses shall be designed and approved by a licensed engineer. Truss manufacturer shall furnish all drawings for bracing required on trusses. Scissors trusses are acceptable with a level bearing plate.

Truss Design:

Span: (Specify span to outside of post)
Slope: 5 in 12
Truss Spacing: 4' 0" on center
Overhang: 1'- 0"
Gable end trusses shall be sheathed

Truss Loadings:

Garrett, and Allegany, Counties:

Top chord Snow Load 40 psf, Dead Load 5 psf Bottom chord Live Load 0 psf, Dead Load 5 psf

Washington County:

Top chord Snow Load 35 psf, Dead Load 5 psf Bottom chord Live Load 0 psf, Dead Load 5 psf

Frederick east to Harford including southern Maryland counties:

Top chord Snow Load 30 psf, Dead Load 5 psf Bottom chord Live Load 0 psf, Dead Load 5 psf

Cecil Eastern Shore counties:

ROOFING CONSTRUCTION NOTE:

Top chord Snow Load 30 psf, Dead Load 5 psf Bottom chord Live Load 0 psf, Dead Load 5 psf

ROOFING MATERIAL MUST BE STORED PROPERLY IN ACCORDANCE WITH THE

IT IS STORED OUTSIDE TO PREVENT PREMATURE DETERIORATION.

MANUFACTURER'S RECOMMENDATIONS. ROOFING MATERIAL MUST BE COVERED IF

ALUMINUM ROOFING MAY BE USED IN LIEU OF STEEL. ROOF SHALL BE DESIGNED

CONSIDERING EXPANSION AND CONTRACTION AND COMPATIBILITY WITH OTHER METALS. THE ALUMINUM ROOFING SHALL HAVE A MINIMUM THICKNESS OF 0.018

TIMBER CONSTRUCTION NOTES

1/2012

1. All lumber below the fascia board level shall be preservative pressure treated Southern Yellow Pine, No.2 KD, 19% m.c. or better. All other lumber may be either Southern Yellow Pine or Spruce-Pine-Fir No. 2 or better unless specified otherwise. Protection such as clear preservative, paint, or pressure treatment shall be required for the plywood. Timber shall be pressure treated in accordance with the chart below.

Use Codes for Treated Building Materials		
Use Code for Ground or Manure Contact Lumber	UC4B	
Use Code for all other Treated Lumber	UC4A	

2. All metal hardware and nails shall be stainless steel or hot-dip galvanized (HDG). Stainless steel shall be grade types 304 or 316. Hot dipped galvanized fasteners shall conform to ASTM A 153 and hot-dip galvanized connectors shall conform to ASTM Standard A 653 (Class G-185).

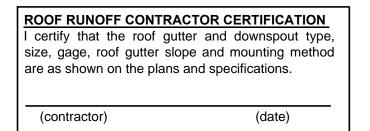
All fasteners, connectors, and any other metal contacting ACZA, ACQ or CA treated wood shall be stainless steel.

There may be additional products (other than stainless steel and hot-dip galvanized) which are suitable for use in treated wood except for the types listed in the note above. These screws and connectors have proprietary anti-corrosion technologies and are acceptable for treated wood exposed to moisture when used according to the hardware manufacturer's recommendations and <u>must be clearly marked "for use with" the **type** of treated wood being used.</u>

- 3. All structural nail connections must be nailed with twisted or ring shank nails.
- 4. Power driven nails (PDN) shall be 0.131 Diameter or larger, deformed shank, and helical (spiral) or annular (ring) type. The number and length of 0.131 diameter power driven nails is specified in parenthesis next to each connection. Pressure shall be applied to wood members to insure tight joints when using power driven nails. The head of the nail may not be countersunk more then 1/16" into the wood.

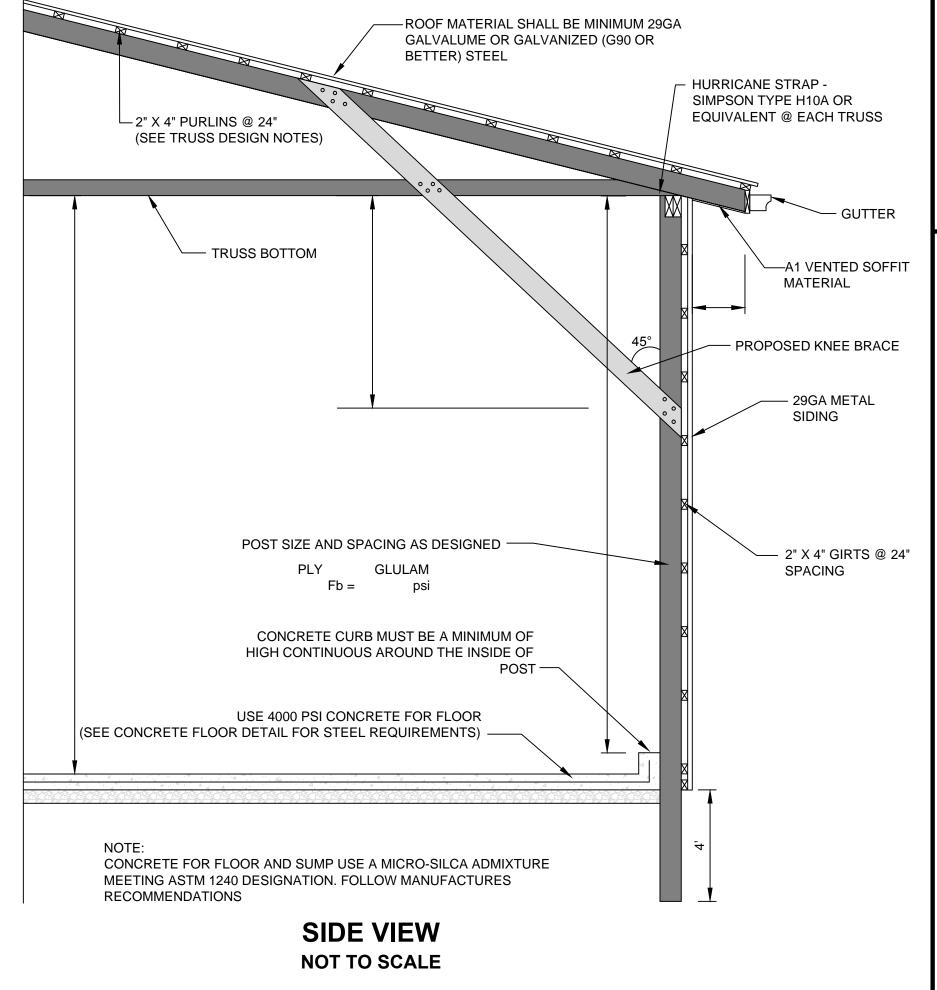
ROOF GUTTER CONSTRUCTION SPECIFICATIONS

- All materials and construction shall be in accordance with applicable NRCS standards and construction specifications.
- 2. All components of the completed system shall conform to the lines, grades, elevations, dimensions and materials shown on the plans.
- 3. Any changes in the plans or specifications must be approved by the original plan approver prior to being made. Changes are to be reviewed by the landowner for concurrence.
- 4. All disturbed areas shall be fertilized, seeded, and mulched or otherwise stabilized as required on the construction plans.
- 5. Existing fascia boards that are damaged, rotten, otherwise unstable or with a nominal thickness less than 2 inches, shall be replaced.
- 6. Rafter ends that are damaged or rotted shall be repaired.
- All lumber used for fascia boards or for rafter end repair shall have a nominal thickness of 2 inches. Cover all fascia boards with aluminum or vinyl flashing or paint before the roof gutter is installed. NO PRESSURE TREATED LUMBER ALLOWED.
- 8. Down spout outlet connections shall be the manufacturer's preformed (insert) outlets for the given size shown on the design, unless otherwise approved.
- 9. Aluminum gutters and downspouts shall have a minimum thickness of 0.027 inch.
- 10. Galvanized steel gutters and downspouts shall have a minimum thickness of 28
- 11. Where animals or equipment may come in contact with downspouts, steel pipe, schedule 40 PVC or similar material will be used for the downspout.
- 12. Roof gutter supports shall have a maximum spacing of 24 inches unless otherwise approved. Roof gutters shall be mounted to the fascia board using hidden hangers, bolts and ferrules, gutter screws and ferrules, or cradles. Other methods must be approved by the engineer. **Spike and ferrules are not approved**.
- 13. Itemized invoices from suppliers shall be provided to verify gutter and downspout size, length, material, material gage, and hanger type.
- 14. The Soil Conservation District makes no representation as to the existence or nonexistence of any utilities at the construction site. Shown on these construction drawings are those utilities, which have been identified. It is the responsibility of the landowners or operators and contractors to assure themselves that no hazard exists or damage will occur to utilities. Miss Utility should be contacted at 1 800-257-7777.



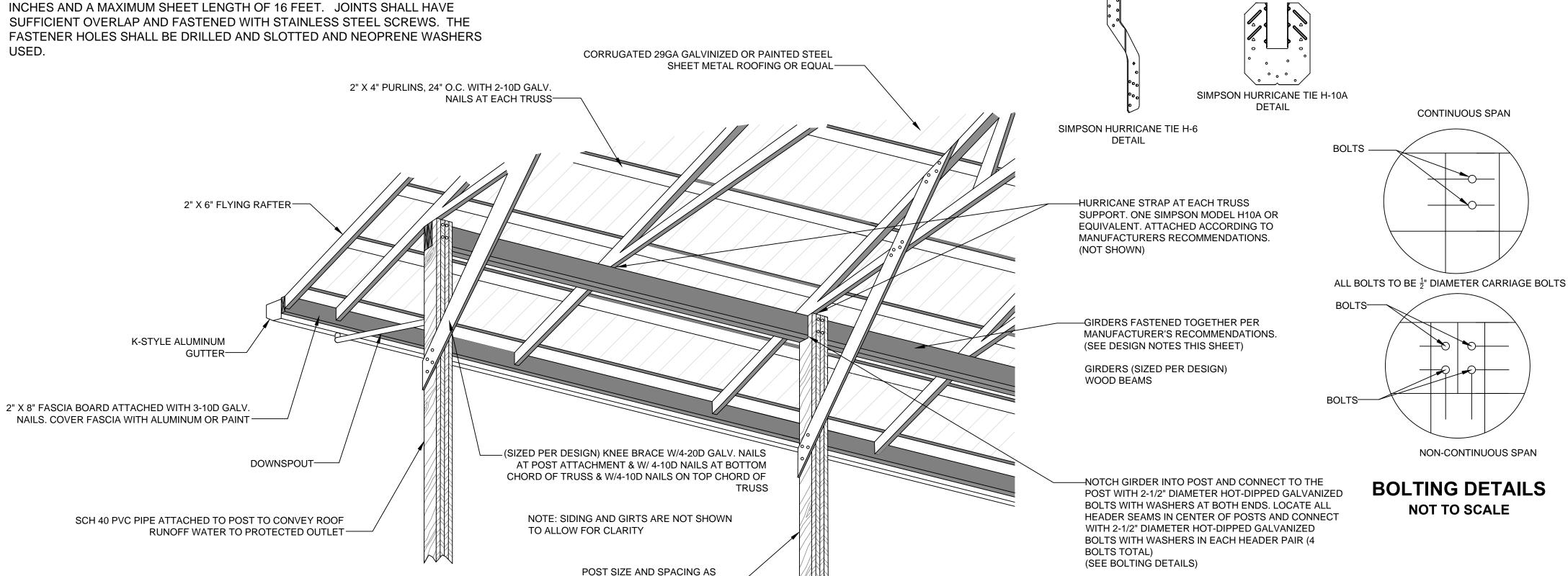
CONCRETE NOTE:

LIQUID NITROGEN WILL CAUSE CONCRETE CORROSION SO CARE SHOULD BE TAKEN TO PREVENT LEAKS. AREAS WHERE SPILLS OR LEAKS HAVE OCCURRED SHALL BE RINSED IMMEDIATELY.



ACILIT

LANE AGRICHEMICA of



FRAMING DETAIL

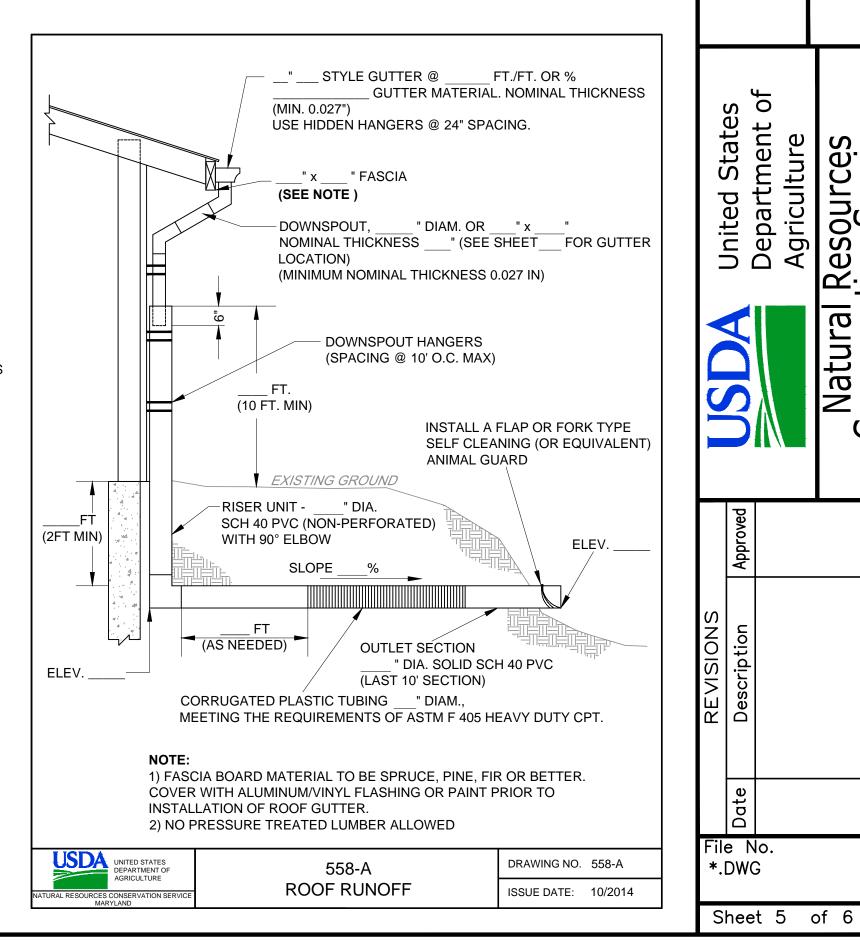
NOT TO SCALE

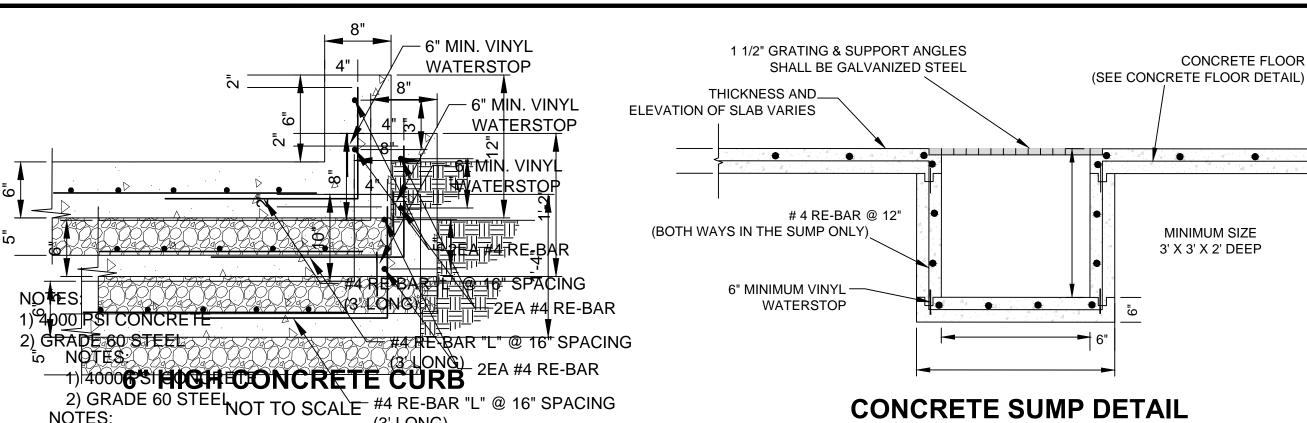
DESIGNED-

GLULAM

PLY

Fb =

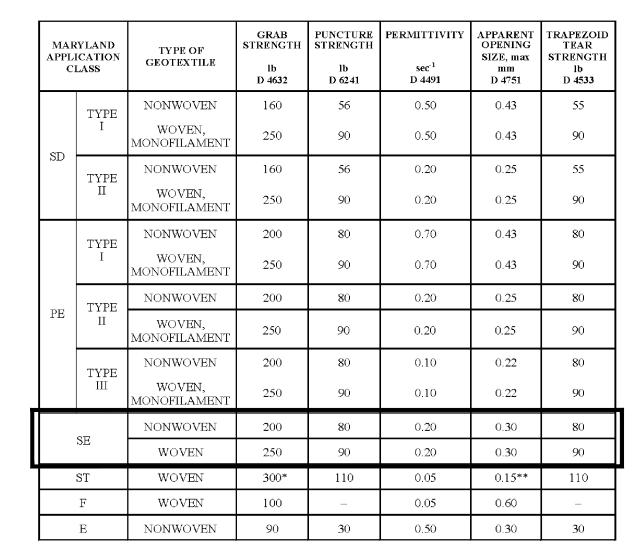




NOT TO SCALE

Stay-Open Valve and Actuator Ring **A** CAUTION Chemica storage 61 cm area (24 in) max **▲** CAUTIOI Flammable materials No smoking TYPICAL SIGNS TO BE USED Foot Pedal Actuator

TYPICAL EYEWASH **STATION**



1) 4000 PSI CONCRETE 2) GRADE 60 STEEL

#4 RE-BAR @ 18" GRID SPACING

CONCRETE FLOOR DETAIL

NOT TO SCALE

5" OF CR6 OR #57 STONE AS BASE MATERIAL

NOTE: IF TRACTOR TRAILERS (HS20 RATING) WILL BE

THICKNESS TO 7 ½", #4 RE-BAR @ 18" GRID SPACING.

TRAVELING ON CONCRETE, INCREASE CONCRETE

All property values are based on minimum average roll values in the weakest principle direction, except

The ultraviolet stability shall be 50 percent after 500 hours of exposure for all classes, except Class F,

which shall be 70 percent (D 4355).

* Minimum 15 percent elongation. ** This is a MINIMUM apparent opening size, not a maximum.

CONCRETE CONSTRUCTION SPECIFICATIONS FLAT WORK ONLY Revised 4\14

POST EMBEDMENT DETAIL

NOT TO SCALE

NOTE: THIS DETAIL REPRESENTS THE TYPICAL EMBEDMENT

OF A PERIMETER POST FOR THE STRUCTURE.

1) 4000 PSI CO8CRETE CURB

NOT TO SCALE

CONCRETE FLOOR

(SEE CONCRETE FLOOR DETAIL)

COMPACTED EARTHFILL

- 1 - 1/2" X 15" STEEL ROD THROUGH

POSTS WHERE CONCRETE COLLAR

1' PLACED CONCRETE COLLAR

IS PLACED (REQUIRED)

(CONCRETE WET MIX)

- 8" X 24" Ø CONCRETE FOOTING

10" HIGH CONCRETE CURB

NOT TO SCALE

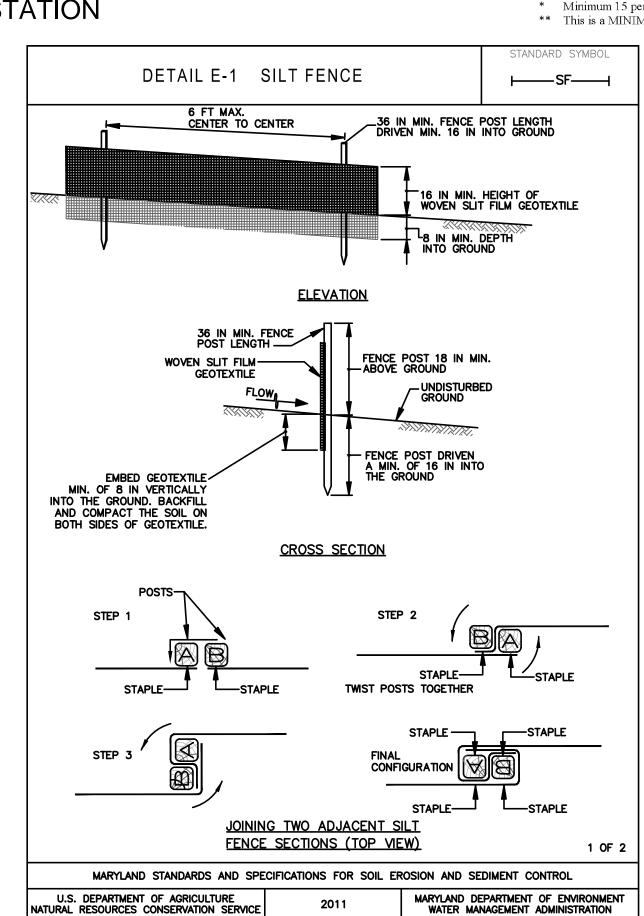
2) GRADE 60 STEEL

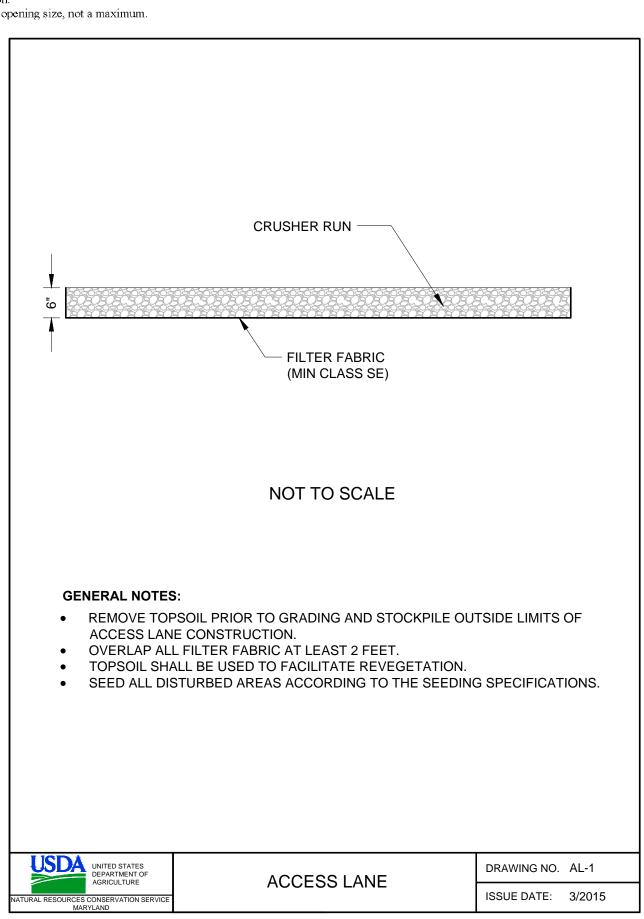
GLULAM

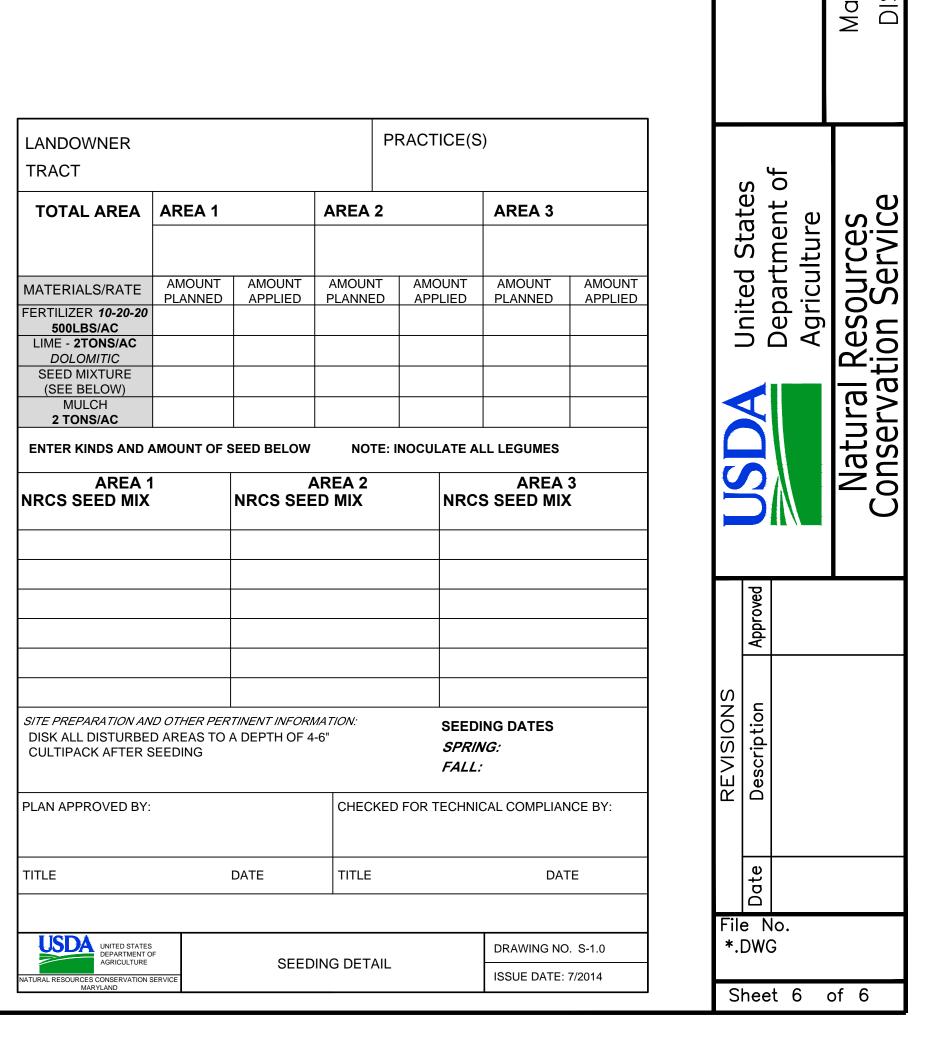
PLY

Fb =

- 1. All materials and construction shall be in accordance with applicable NRCS Practice Standards
- 2. Any changes in the plans or specifications must be approved by the design approver prior to being made. Changes are to be reviewed by the landowner for concurrence.
- Concrete shall have Type IA or IIA cement, 28-day compressive strength of 4,000 psi, 5% air entrainment and a slump of 3 to 5 inches. Air entrainment admixtures shall conform to ASTM
- Reinforcing steel shall conform to ASTM A615, Grade 60 steel. All reinforcing material shall be free of dirt, loose rust, scale, oil, paint or other coatings. The steel shall be accurately placed into position, as shown on the plans, and securely restrained and blocked into position prior to placement of concrete. Insertion of steel into fresh concrete is not permitted. Reinforcement steel shall have a minimum of 2 inches of concrete cover against all forms and 3 inches against soil, unless otherwise shown on the plans. All other reinforcement steel splices shall overlap a minimum of 18 inches. Welded wire mesh shall conform to ASTM A1064 and overlap a minimum of 6 inches. The welding of reinforcing steel is not permitted.
- Waterstop will be used as shown on the plans and at all cold and construction joints. The type of waterstop will be approved by the field technician prior to use.
- Plasticizing or plasticizing and retarding admixtures may be used and shall conform to ASTM C1017 or ASTM C494 Types F or G.
- Concrete shall be delivered to the site and discharged completely into the forms within 90 minutes after the truck leaves the plant. This time shall be reduced to 45 minutes when the atmospheric temperature is over 90° F. The concrete shall be maintained at a temperature below 90° F during mixing, conveying and placement. Set retarding admixtures may be used to increase mixing time. Water reducing and/or retarding admixtures shall conform to ASTM C494 Types A, B, D, F or G.
- Concrete shall not be placed when the daily minimum atmospheric temperature is less than 40° F unless facilities are provided to prevent the concrete from freezing. The concrete shall be protected from freezing for a minimum of 7 days or the concrete shall be kept at a temperature of 55° F for a minimum of 3 days. Accelerating or water-reducing and accelerating admixtures shall be noncorrosive and conform to the requirements of ASTM C494, Types C and E. Cold weather concreting procedures shall conform to ACI-306.
- Concrete shall be kept continuously moist for the curing period after the placement of the concrete. Moisture may be applied by spraying or sprinkling as necessary to prevent the concrete from drying. Concrete shall not be exposed to freezing during the curing period. Curing compounds may be used in lieu of the application of moisture. Curing compounds shall conform to ASTM C309, type 2.
- 10. Concrete surfaces shall be screeded, floated, troweled and broom finished unless otherwise
- 11. Defective concrete, honeycombed areas, voids left by the removal of tie rods, ridges on all concrete surfaces permanently exposed to view or exposed to water, shall be repaired immediately after the removal of forms. All voids shall be reamed and completely filled with quickset, nonshrink hydraulic cement.







ACILI

GRICHI

